

**AMENDMENTS TO THE CLAIMS**

**1-28. (Cancelled)**

**29. (Currently amended)** ~~The A resin coating method of metal gears as claimed in claim 28,~~ which is a method of applying a resin comprising a polymer alloy in which a polyphenylene phase is dispersed in a matrix phase of an aliphatic polyamide to a surface of the metal gears, the method comprising a surface pretreating step of subjecting the metal gears to a silane-coupling treatment after a shot blast treatment; a preheating step of heating the metal gears to a predetermined temperature within a range of from 40°C to a melt injection temperature of the resin and a mold for molding to a predetermined temperature within a range of from 40°C to (melt injection temperature of the resin - 50°C) and also to a temperature region lower than the temperature of the insert member; a molding step of injecting a molten resin in a state that the preheated metal gears are positioned in the preheated mold; a holding step of holding a molding in the mold; and a cooling step of taking the molding out of the mold, and gradually cooling the same to room temperature.

**30. (Currently amended)** The resin coating method of metal gears as claimed in ~~claim 28~~claim 29, wherein the metal gears are a metal gear for transmitting power and/or angle of rotation, or metal splines and serration, for transmitting power.

**31. (Currently amended)** The resin coating method as claimed in ~~claim 28~~claim 29, wherein the metal gears are at least one selected from steel, iron, copper, aluminum, titanium, or alloys containing those, or their composite members.

**32. (Cancelled)**

**33. (Currently amended)** The resin coating method as claimed in ~~claim 28~~claim 29, wherein the resin applied to the surface of the insert member has a thickness in a range of from 5  $\mu\text{m}$  to 30 mm, and can be molded in an optional thickness at each site of gear surface.

**34. (Currently amended)** Resin-coated metal gears which are a molding obtained by the resin coating method as claimed in ~~claim 28~~claim 29, wherein the molding is free from orientation of resin after molding, and has suppressed resin crack and resin peeling.

**35. (Currently amended)** Resin-coated metal gears comprising two gears constituting a pair of gears that transmit power and/or angle of rotation by contact rotating tooth portions ~~there-~~effhereof, wherein all tooth surfaces of the two gears comprise a molding obtained by the resin coating method as claimed in ~~claim 28~~claim 29, or all tooth surfaces (tooth contact sites) of one gear comprises a molding obtained by the resin coating method as claimed in ~~claim 28~~claim 29, and another gear intermeshing with the one gear is a non-resin-coated metal gear.

**36. (Currently amended)** Resin-coated metal gears obtained by the resin coating method as claimed in ~~claim 28~~claim 29, wherein when a part of tooth surface is coated with a resin, tooth surface of another gear contacting and intermeshing with non-resin-coated tooth surface of the gear is coated with a resin.

**37. (Currently amended)** Resin-coated metal gears obtained by the resin coating method as claimed in ~~claim 28~~claim 29, having impact resistance far superior to that of a resin-made gear.

**38. (Currently amended)** Resin-coated metal gears obtained by the resin coating method as claimed in ~~claim 28~~claim 29, having fatigue resistance far superior to that of a resin-made gear.

**39-40. (Cancelled)**

**41. (New)** The resin coating method of metal gears as claimed in claim 29 which is a method of applying a resin comprising a polymer alloy in which a polyphenylene phase is dispersed in a matrix phase of an aliphatic polyamide to a surface of the metal gears, the method comprising a surface pretreating step of subjecting the metal gears to a silane-coupling treatment after a shot blast treatment; a preheating step of heating the metal gears to a predetermined temperature within a range of from 80°C to (melt injection temperature of the resin - 20°C) and a mold for molding to a predetermined temperature within a range of from 70°C to (melt injection temperature of the resin - 80°C) and also to a temperature region lower than the temperature of the metal gears.